

## I. AMENDMENTS

### AMENDMENTS TO THE CLAIMS

Please enter the amendments to claims 1-17, as shown below.

1. (Currently amended) A recombinant Recombinant Modified Vaccinia Vaccine Ankara (MVA) virus based on MVA, preferably a recombinant MVA virus, comprising at least one nucleic acid coding for a *Plasmodium falciparum* merozoite surface protein-1 (MSP-1) MSP-1 protein or a fragment or mutein thereof, ~~a fragment or a mutein of it.~~
2. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 1, ~~characterised in that~~ wherein the MSP-1 protein is the MSP-1 protein of the isolate 3D7 or the MSP-1 protein of the FCB1 strain.
3. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 1 ~~or 2, characterised in that~~ , wherein the fragment is selected from the fragments p83, p30, p38, p33, p19 and p42 or combinations thereof ~~of them.~~
4. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 1, wherein ~~one of the Claims 1 to 3, characterised in that~~ the mutein is differentiated from the MSP-1 sequence by addition, deletion, insertion, inversion and / or substitution of one or more amino acids.
5. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 1, wherein ~~one of the Claims 1 to 4, characterised in that~~ the nucleic acid coding for MSP-1 is reduced in its AT content compared to the wild type sequence.
6. (Currently amended) The recombinant MVA virus Recombinant virus according to Claim 1, wherein ~~one of the Claims 1 to 5, characterised in that~~ the nucleic acid coding for MSP-1 is under the control of a promoter.

7. (Currently amended) The recombinant MVA virus ~~Recombinant virus~~ according to Claim 1, wherein ~~one of the Claims 1 to 6, characterised in that~~ the nucleic acid at the 5' end is fused with a nucleotide sequence coding for a signal peptide sequence.

8. (Currently amended) The recombinant MVA virus ~~Recombinant virus~~ according to Claim 7, ~~characterised in that~~ wherein the signal peptide sequence controls the secretion of the gene product.

9. (Currently amended) The recombinant MVA virus ~~Recombinant virus~~ according to Claim 7, ~~characterised in that~~ wherein the signal peptide sequence controls the localisation of the gene product relevant to the membrane.

10. (Currently amended) The recombinant MVA virus ~~Recombinant virus~~ according to Claim 7, ~~characterised in that~~ wherein the signal sequence controls the GPI anchoring of the gene product.

11. (Currently amended) A method ~~Method~~ of production of a recombinant Modified Vaccinia Vaccine Ankara (MVA) virus ~~virus based on MVA~~, wherein the method comprises the steps:

- a) transfecting [[of]] a eukaryotic host cell with a transfer vector, wherein
  - i) the transfer vector comprises a nucleic acid encoding a *Plasmodium falciparum* merozoite surface protein-1 (MSP-1) ~~MSP-1~~ protein, ~~a nucleic acid coding or~~ a fragment or a mutein thereof, wherein the mutein differs [[-]] by the addition, deletion, insertion, inversion and / or substitution of one or more amino acids [[-]] from the MSP-1 sequence; and optionally also comprises a selection marker;
  - ii) the nucleic acid according to i) is flanked by MVA sequences 5' and / or 3', wherein the sequences are suitable for the homologous recombination in the host cell;
- b) infection with a virus based on MVA, preferably MVA;
- c) cultivation of the host cell under conditions suitable for homologous recombination; and
- d) isolation of the recombinant virus based on MVA.

12. (Currently amended) The method ~~Method~~ according to Claim [[10 or]] 11, ~~characterised in that~~ wherein the virus is isolated from the culture supernatant or from the cultivated host cells.

13. (Currently amended) A vaccine ~~Vaccine~~ comprising:

- a) the recombinant virus according to one of the Claims 1 to 9; and
- b) a pharmacologically compatible carrier.

14. (Currently amended) The vaccine ~~Vaccine~~ according to Claim 13, ~~characterised in that the vaccine also contains as constituent~~ further comprising: c) MSP-1, a fragment or a mutein thereof of it and / or a nucleic acid coding for MSP-1, or a fragment or mutein thereof ~~one of them~~.

15. (Currently amended) The vaccine ~~Vaccine~~ according to Claim 14, ~~characterised in that~~ wherein the constituents a) and c) can be administered simultaneously, sequentially or separately.

16. (Currently amended) A method ~~Use of the recombinant virus according to one of the Claims 1 to 9~~ for the prophylaxis and / or therapy of malaria, the method comprising administering the recombinant virus of any one of claims 1 to 9.

17. (Currently amended) A method ~~Use of the recombinant virus according to one of the Claims 1 to 8 and of MSP-1, a fragment or a mutein of it and / or a nucleic acid coding for them~~ for the prophylaxis and / or therapy of malaria, the method comprising administering: i) a recombinant virus according to one of claims 1 to 8; and ii) MSP-1, a fragment or a mutein thereof and / or a nucleic acid coding for MSP-1, or a fragment or mutein thereof.